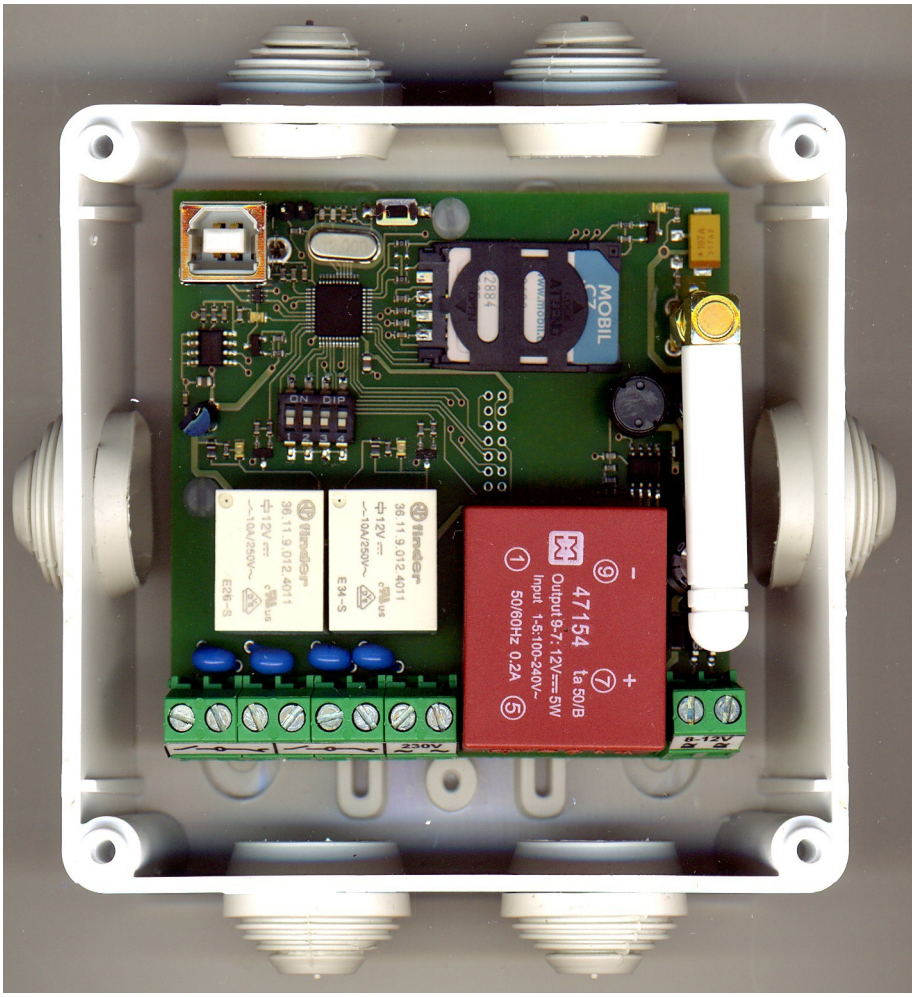
User manual

GSM remote control

B214



You can look at videomanuals as well:

B214ENG PC setting: www.youtube.com/watch?v=J7_0eRk88Bw
B214NG - Internet setting: www.youtube.com/watch?v=GrAO37vDtLQ
GSM remote control B214 The simplest way to setup: www.youtube.com/watch?v=V2ILvHsqYkc

Safety:

Please, keep safety precautions as follows:

· **Do not use our device nearby the medical aparatures.**
· **Do not use our device nearby explosive atmosphere.**
· **Do not put to high moisture, chemicals and so on.**
· **Do not try to repair it yourself.**
· **It is banned to put SIM card into holder under power supply.**
· **Do not try to run our device without GSM antenna.**

Product description
The GSM remote control B214 a wireless gsm remote control switch that connects to the GSM cell phone network.
It has four independent relay switches, and two relay 230V/10A. Relay switch is activated by calling by cell phone number, it will reject the call without answering and switch on the device connected,then there are no call costs incurred when dialling the unit, it will recognize an authorized telephone number and reject the call without answering. Relays can be switched by SMS as well.

More details
USB connector included
Installed inside box with covering IP65
power supply 230V or 12V (DC or AC)
2 pcs relays 230V/10A
electronic protection against reversing of polarity
easy installing
USB connector included.
Internet setting via GPRS – you can set or watch all parameters from anywhere
Possibility to upgrade new firmware

Technical parameters:

Power supply: 230V
Power supply 2: 10 -18V DC or 8 - 12V AC (automatical reversing of polarity protection)
Phone numbers: 1 000
Relay number : 2 (230V/10A with change-over contacts NO and NC)
Setting relay time switching: 0 - 32768 seconds (if 0, than first ringing will switch relay ON and second one will switch relay OFF)
GSM frequency: 850/900/1800/1900MHz
Working temperature: -20 C ….. +50 C

How can you setup all parameters?
You can choose from three possibilities.

1. **You can use the easiest way worlwide.**
   Just push switch 1 on the DIP switch to ON, call in the SIM card inside GSM remote control and your phone number will be saved automatically. Then push switch 2 to ON position (relay1) or push switch 3 to ON position (relay2) or you can have switch 1 and switch 2 in ON position. If you remove switch 2 to ON position, it means, when you will ring to GSM remote control SIM card, it will automatically hang up and switch relay 1.If you remove switch 3 to ON position, it means, when you will ring to GSM remote control SIM card, it will automatically hang up and switch relay 2.If you remove switch 2 and 3 to ON position, it means, when you will ring to GSM remote control SIM card, it will automatically hang up and switch relay 1 and relay 2. If you remove switch 4 to ON position, it means, that when anybody calls in the GSM remote control you will get SMS as follows:

Example
Device name: switche-over from number +420 777753500 date:8.5.2014 14:05:47

Simply NO SMS and NO PC software. All setting takes a few seconds

2. **Setting by SMS commands.**
   Setting phone number using SMS command
   Deleting phone number using SMS command
   Switch ON/OFF any relay
3. **Setting by PC software**
4. **Setting by Internet**

More advantages:

user administration via mobile phone or PC software or Internet
it is possible to add any relay to any phone number, so that for example the first phone number can control relay1 only, the second phone number can control relay1 and relay2 and the third phone number can control relay2 only.

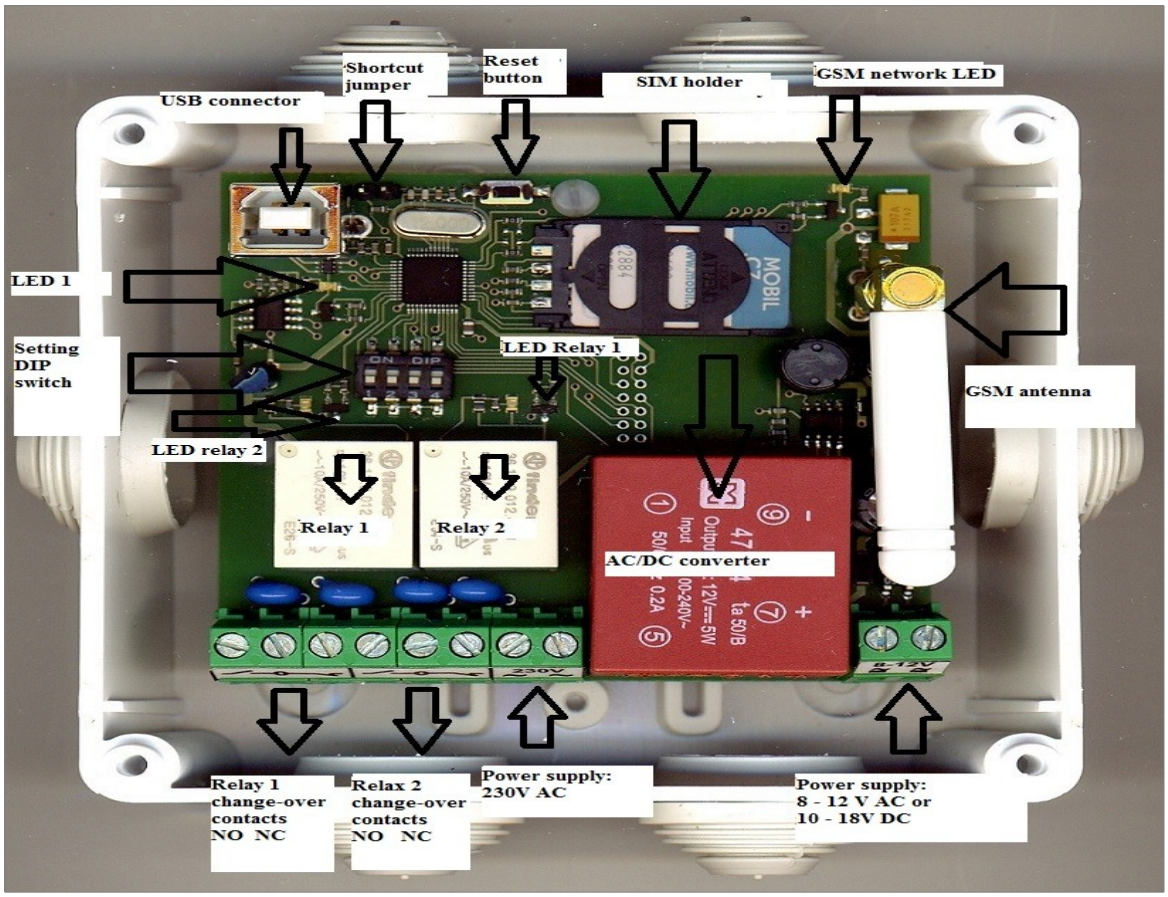
Device installing
Put your SIM card inside SIM card holder (see picture below). SIM card must have no PIN, no SMS and no phone numbers. Even voice box must be disarm.

Power supply connecting

There are three possibilities to connect power supply:

1. Power supply ~ 230V . Just connect power supply to 230V connectors.
2. Power supply DC 10 – 18V=. Put DC power supply to the connectors 12V at the right side of PCB under GSM antenna. No need to control polarity. It is automatically protected against reversing of polarity.
3. Power supply AC 8 –12V
   Put this power supply into the ~ same connectors (12V).

Device description



Instalation

Put SIM card into SIM card holder. Connect power supply. LED 1 blinks once and then GSM network LED start to blink. GSM network LED blinks quickly at the beginning, it means, that B214 is looking for GSM network. As soon as GSM network is found, this LED will blink with interval 2 -3 seconds.

Just push switch 1 on the DIP switch to ON, call in the SIM card inside GSM remote control and your phone number will be saved automatically. Then push switch 2 to ON position (relay1) or push switch 3 to ON position (relay2) or you can have switch 1 and switch 2 in ON position. If you remove switch 2 to ON position, it means, when you will ring to GSM remote control SIM card, it will automatically hang up and switch relay 1.If you remove switch 3 to ON position, it means, when you will ring to GSM remote control SIM card, it will automatically hang up and switch relay 2.If you remove switch 2 and 3 to ON position, it means, when you will ring to GSM remote control SIM card, it will automatically hang up and switch relay 1 and relay 2. If you remove switch 4 to ON position, it means, that when anybody calls in the GSM remote control you will get SMS as follows:

Example
Device name: switche-over from number +420 777753500 date:8.5.2014 14:05:47

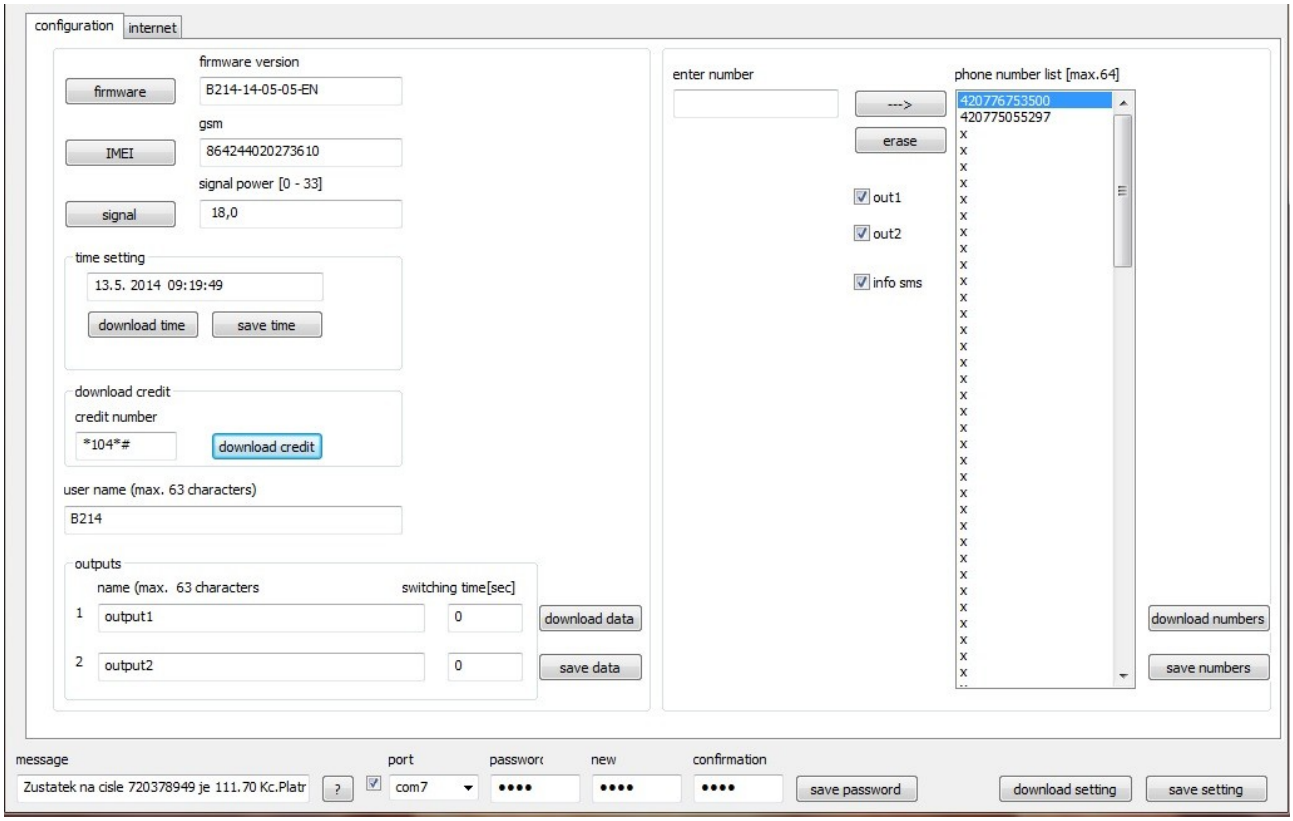
Simply NO SMS and NO PC software. All setting takes a few seconds

If you save more phone number, just progress the same way and B214 will store the phone number in the first free position. It is possible to save this way as many as 128 phone numbers, however it would take too long time. If it is necesary to save more then 4 phone numbers, we recommend using PC software, where is possible to setup all phone numbers very quickly.

After finishing learning regime, which will become when you push switch 1 into position OFF, you will receive info SMS with phone number list, if you setup switch 4 in position ON. LED1 will stop to blink.

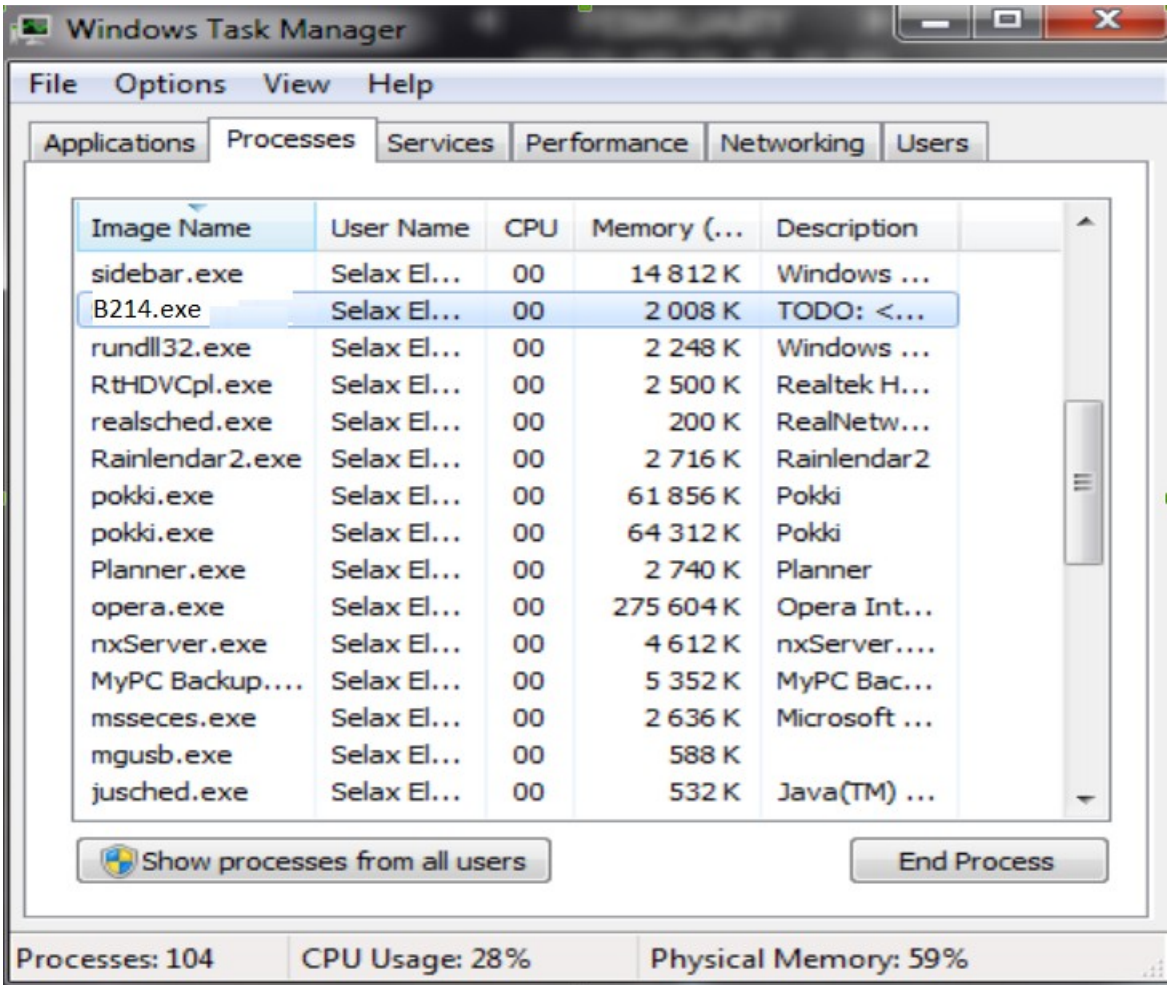
After that you can just ring in B214 SIM card and the selected relay (relays) will be switched ON.

2. PC software setting



Run software:
Connect USB cable to the device and turn B214 ON. After that, run B214 PC software. It starts to search for a port, where B214 is installed. (See videomanual about driver installation.) If B214 finds it, you will see it on the bottom line in the window called **port**. Software includes two windows called: **config** and **Internet.**
If port is not found, turn your PC software off, take your cable out , let it be about 5 seconds away and then connect it to the device again. If some problems were on, turn your PC software off, switch the cable off again, turn the power supply off, wait for about 10 seconds, then connect cable to the device and after that turn power supply on. All devices connected to USB are predisposed for a jamming, therefore there is a possibility „to freeze“ sometimes. In that case, turn your PC software off and restart your device again. If PC software so-called „freeze“, just do as follows:
Click on the bottom line next to Start button, press right button of your mouse and choose Start Task Manager.

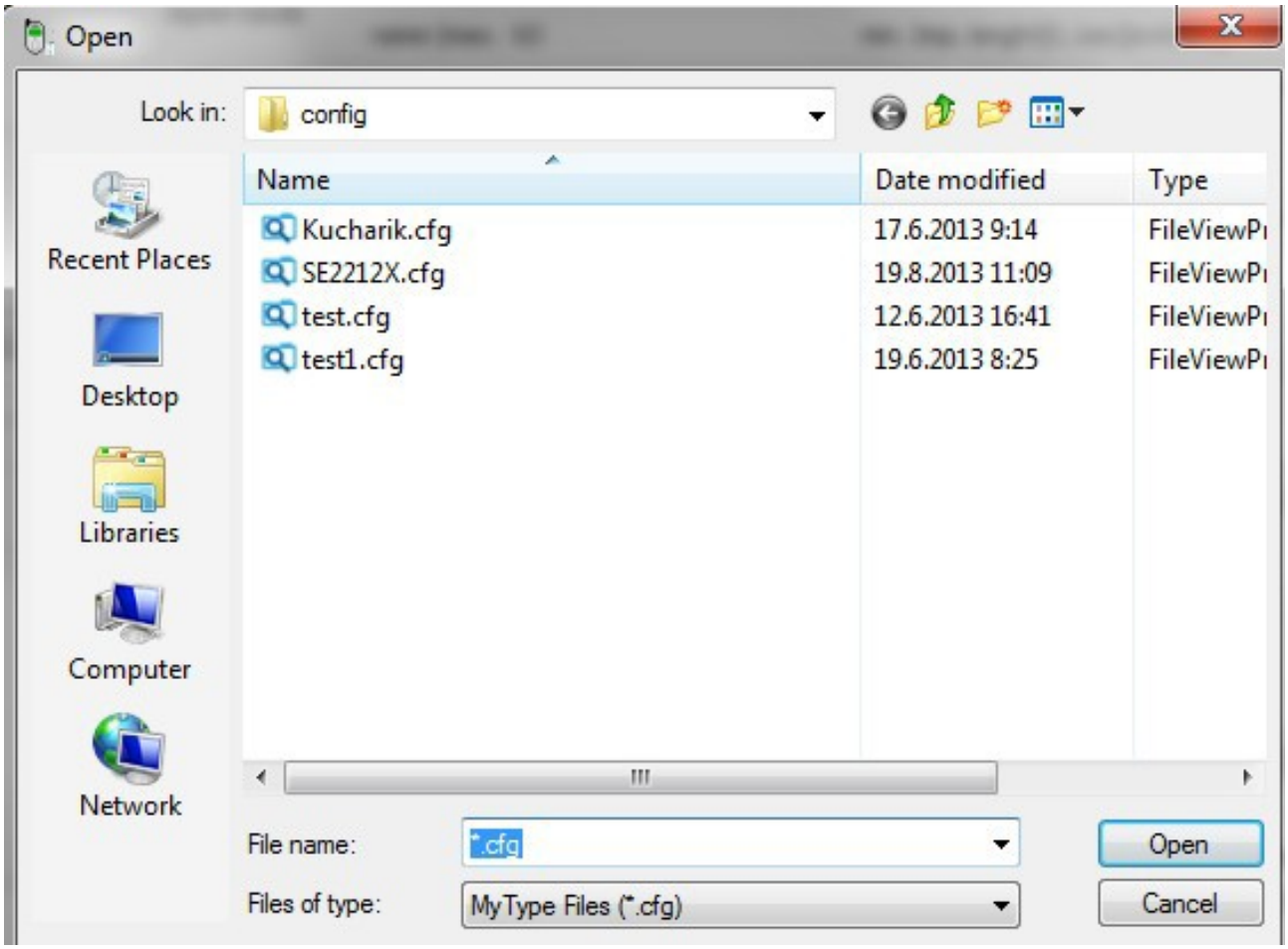
It looks as follows:


Windows Task Manager
File Options View Help
Applications Processes Services Performance Networking Users
Image Name User Name CPU Memory (... Description
sidebar.exe Selax El... 00 14 812 K Windows ...
B214.exe Selax El... 00 2 008 K TODO: <...
rundll32.exe Selax El... 00 2 248 K Windows ...
RtHDVCpl.exe Selax El... 00 2 500 K Realtek H...
realsched.exe Selax El... 00 200 K RealNetw...
Rainlendar2.exe Selax El... 00 2 716 K Rainlendar2
pokki.exe Selax El... 00 61 856 K Pokki
pokki.exe Selax El... 00 64 312 K Pokki
Planner.exe Selax El... 00 2 740 K Planner
opera.exe Selax El... 00 275 604 K Opera Int...
nxServer.exe Selax El... 00 4 612 K nxServer....
MyPC Backup.... Selax El... 00 5 352 K MyPC Bac...
msseces.exe Selax El... 00 2 636 K Microsoft ...
mgusb.exe Selax El... 00 588 K
jusched.exe Selax El... 00 532 K Java(TM) ...
Show processes from all users
End Process
Processes: 104 CPU Usage: 28% Physical Memory: 59%

B214.exe application and click on that by mouse. If turns blue, click on button called **End Process** on the right bottom corner.

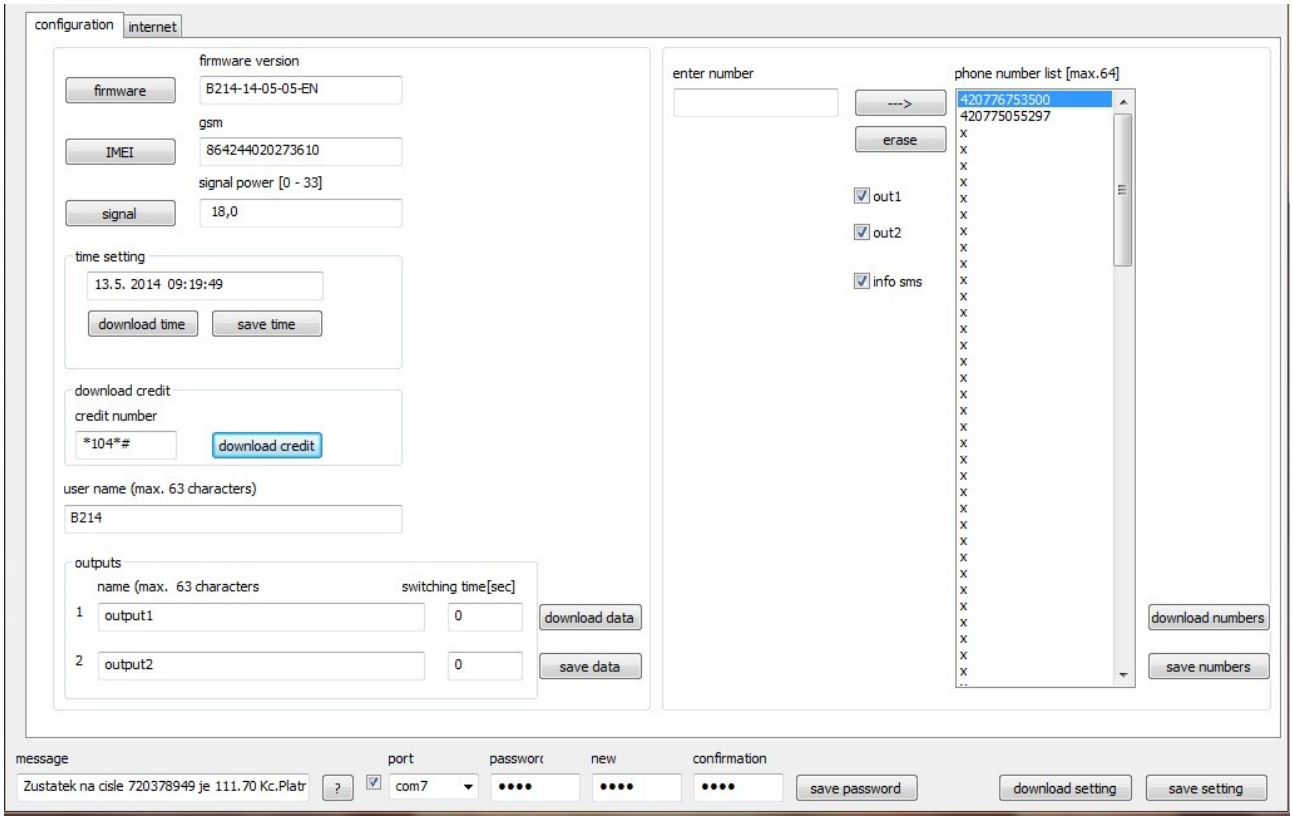
Bottom line:

save password – Configuration is saved by 4 digit password. You can change your password like this:
· Write your current password into item called **password**.
· Write new password into item called **new password** and **confirmation**.
· Click on **save button** to save your new password.
Factory password is **1234**. We recommend to change this password.
download setting, save setting – you can save or download all settings to or from configuration file with .cfg suffix. If you click on download setting button, it will appear for example this window:



You can save or download all settings, which you have done. If you want to have all settings saved in your configuration file in your B214, when B214 download all settings, it is necessary to save it. It means, click on **Save data** button in **config** window and **Save numbers** in **phone numbers** window. If you would not do it, setting will not be put into processor and B214 will not be working properly.

Configuration setting:



firmware – downloading a firmware version
read IMEI – downloading IMEI identification number of GSM module. IMEI will appear, if SIM card is connected to the GSM network and everything is OK. If not, then there is a problem about connecting to the GSM network or SIM card can be dirty.
signal – downloading signal strenght.
time setting – downloading time from your device. If you click on **save time** button, PC time will be saved automatically into your device. There is not a backup for the time, but it is authorized all the time, when B214 will get SMS. If you want to have the accurate time all the time, click on **sms after restart** item (under **system options**). It that case, B214 will inform you, there is not accurate time there. If you want to have the right time, just send any SMS to B214 and the right time will be set automatically.
download credit – You can choose any mobile operator and click on **download credit** button.
User name – Enter device name into this item. For example **My house.** If you checked item **called enable user name in SMS**, this name will be automatically added in SMS. It is useful for instance, if you use more devices, so that you know right away, which device sent SMS.

Output name – enter output name.
switching - time, when output is turned on. If preset value 0, output is turned on all the time, until is turned off by some action, for instance SMS.

Phone number list (see videomanual)

· Click your mouse in the right position.
· Click on **Erase** button, if you want to delete some phone number.
· Enter phone number, which you want to add into phone number list.
· Click on ---> mark to shift phone number into phone number list

out1, out2 – it is possible to any phone number to assign any relay. You can check option1 (relay1), or 2 (relay2), or both relay

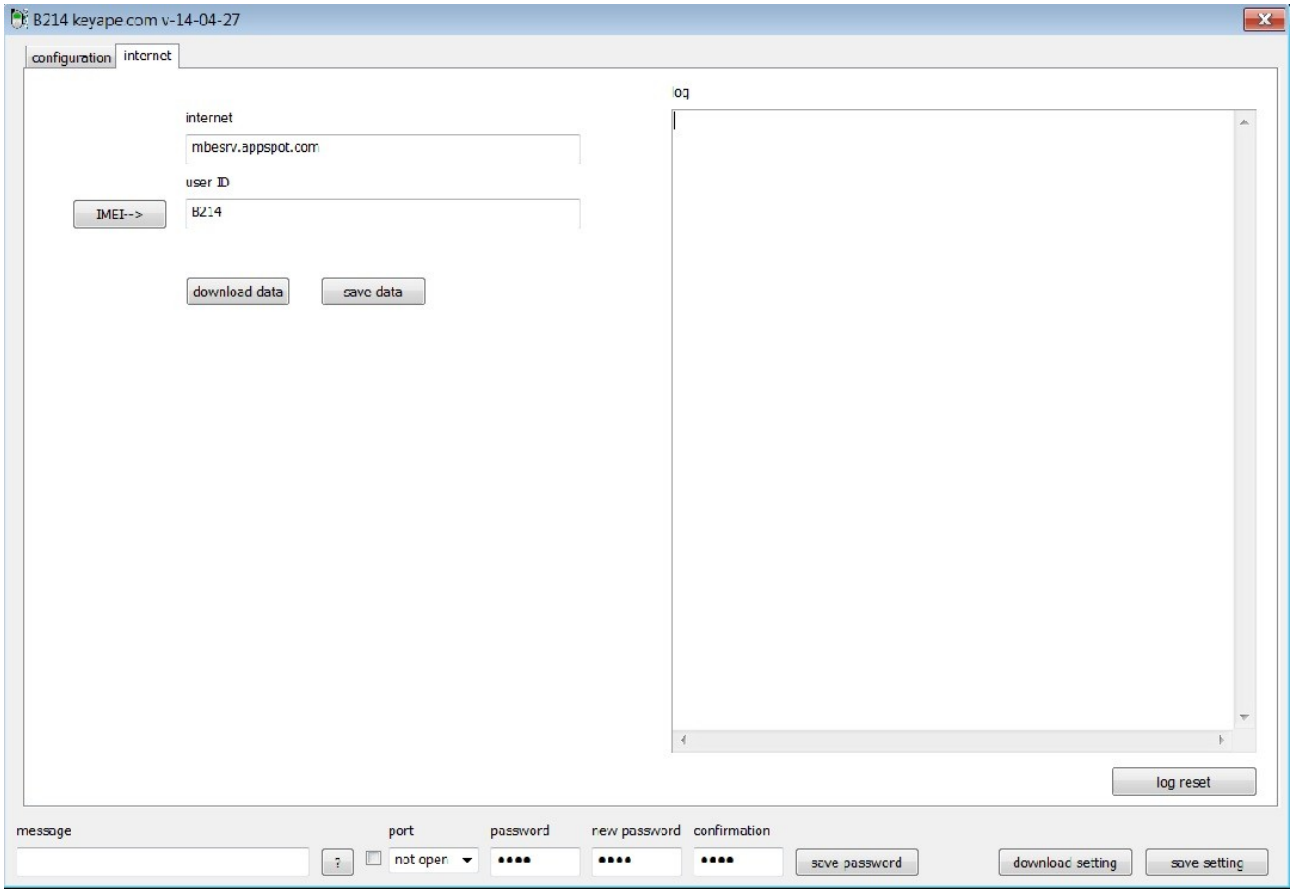
at a time. If you ring B214, chosen relay (relays) will be switched by ringing only.

info SMS – if you check this option, B214 will send information SMS to preset phone number (numbers). You can choose any combination, it means, to assign any phone number any relay and any information SMS.
If all parameters are finished just click Save numbers button. If you want to downnload them later, just click Download numbers button.

If everything is done, just click on the cross in the right upper corner to close the software.

GPRS Internet setting and editting
Setting and editing all parameters is the same like using USB connector. What is necessary is to activate GPRS in SIM card used in B214.

To use GPRS connection is provided between PC software and B214GPRS by server where temporary data are saved. After each reading/saving are data erased automatically. Sign in is nameless just with so-called ID (password), which is chosen by user with no registration requests.



IN Internet window (necessary to do it via USB connection) is necessary to setup:
• Server name, which is given above with internet item above.

See videomanual – B214GPRS – Internet setting.

SMS commands

Add phone numbers: Command *ad + phone number + attributes. Write everything altogether with no gap.

Example: *ad420608777999*#*

attribute first figure means, how a phone number will turn on relay 1.

1 * turn on, # not turn on.

attribute second figure means, how a phone number will switch relay 2.

1 * turn on, # not turn on.

Attribute third mark means, if B214 sends out to this phone number information, about access to B214 from another phone numbers. Phone number will be put on the first free position automatically.

Remove phone numbers: Commad *er + phone number.

Example *er420608777999

will remove phone number 420608777999 from a phone number list, if included.

Output Turn ON /Turn Off: Command *sw + attributes. * turn relay on, # turn relay off, x no change.

Examples: *sw** - turn relay 1 and 2 on

sw# - turn relay 1 off and turn relay 2 on
swx - relay 1 with no change and turn relay 2 on

Relay will be turned on according to switching time. If switching time is 0 – it will be turned on all the time. It will be turned off after another ringing. Switching interval is 1 - 32768 sec.

Applications:

Applications include the remote control of heating in holiday homes, lighting, engine pre-heaters, aviation engine heaters, irrigation systems, water well pumps, pumping stations, cabin heaters, resetting of remote servers, arming and disarming security systems, access control of gates and garage doors.